

ABSTRACT

An auto-cycling plunger including a hollow, longitudinally extending body, at least one first directional outer seal, at least one second directional
5 outer seal and a valve stem. Both the at least one first directional outer seal and the at least one second directional outer seal are disposed on an exterior surface of the body for creating a seal between the body and a well bore. Portions of the seals extend in a direction substantially parallel to the length of the longitudinally extending body such that these portions are spread
10 resiliently outwardly from the body with an applied pressure, thereby increasing the degree of sealing. The first directional outer seal extending in a direction substantially opposite to the direction of the at least one second directional outer seal. The valve stem includes a valve member, extends through the longitudinally extending body, and has actual ends extending from
15 the body. The valve stem is operable to be shuttled between an open and a closed position. When the valve stem is in the open position, the valve member is longitudinally spaced from a valve seat on the body to allow fluid flow through the length of the body and when the valve stem is in the closed position, the valve member is seated on the valve seat, thereby sealing the
20 body and preventing fluid flow therethrough.